

CLAIMS

1. A multicarrier communication apparatus comprising:
a reception section that receives a multicarrier
5 signal with data mapped on a plurality of carriers;
a measuring section that measures reception quality
of said plurality of carriers; and
a determining section that determines a carrier
having the best measured reception quality as a feedback
10 information carrier.
2. The multicarrier communication apparatus according
to claim 1, wherein when there are a plurality of
communicating stations, said determining section
15 preferentially assigns the carrier having the best
reception quality to a communicating station having a
large amount of data to be transmitted from the subject
apparatus and designates said carrier as the feedback
information carrier for said communicating station.
20
3. The multicarrier communication apparatus according
to claim 1, wherein said determining section determines
said feedback information carrier based on a multicarrier
signal received immediately before transmitting the
25 feedback information.
4. The multicarrier communication apparatus according

to claim 1, further comprising a transmission section that transmits information about said feedback information carrier, wherein said reception section receives a multicarrier signal with feedback information mapped on said feedback information carrier.

5. The multicarrier communication apparatus according to claim 4, further comprising a calculation section that calculates required transmit power so that the reception quality of said feedback information carrier becomes a required quality, wherein said transmission section transmits the calculated required transmit power and information about said feedback information carrier.

6. The multicarrier communication apparatus according to claim 5, wherein said calculation section calculates the required transmit power based on a difference between the reception quality of said feedback information carrier and said required quality.

7. The multicarrier communication apparatus according to claim 1, further comprising a transmission section that transmits feedback information using said feedback information carrier.

8. The multicarrier communication apparatus according to claim 7, further comprising a spreading section that

spreads said feedback information carrier using a predetermined spreading code for feedback information.

9. A base station apparatus comprising the multicarrier
5 communication apparatus according to claim 1.

10. A mobile station apparatus comprising the multicarrier communication apparatus according to claim 1.

10

11. A feedback information communication method comprising the steps of: receiving a multicarrier signal with data mapped on a plurality of carriers; measuring reception quality of said plurality of carriers; and
15 determining a carrier having the best measured reception quality as a feedback information carrier.